

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No. : 10/708,897 Confirmation No. 2896  
Applicant : Bruce W. TRYON  
Filed : 30 March 2004  
TC/A.U. : 3661  
Examiner : Christine M. BEHNCKE  
Title : HYBRID ELECTRIC VEHICLE ENERGY MANAGEMENT SYSTEM  
Docket No. : 5704-00209  
Customer No. : 26659

**PETITION TO DIRECTOR FOR REVIEW OF PROPRIETY OF FINALITY OF FINAL  
OFFICE ACTION UNDER 37 CFR § 1.181 AND MPEP § 706.07(c)**

16 July 2008

**Mail Stop Petition  
DIRECTOR / Group 3661  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

Dear Sir:

Applicant hereby respectfully requests review of the propriety of the finality of a Final Office Action mailed on **16 April 2008**, reconsideration and withdrawal of which had been requested on **07 May 2008**, which was denied both in a Advisory Action mailed on **04 June 2008** and in an interview with the Examiner and Supervisory Examiner on **16 July 2008**.

**STATEMENT OF FACTS INVOLVED**

*Application Status*

1. Claims **1-55** are pending in the application.
2. **Claims 12-20 and 47** stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. **US 2004/0204797** to Vickers.

3. **Claims 21 and 22** stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Vickers in view of U.S. Patent No. **6,307,277** to Tamai et al.
4. **Claim 23** stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Vickers in view of U.S. Patent Application Publication No. **US 2003/0230440** to Kamen et al., and further in view of Tamai et al.
5. The remaining claims – all dependent upon claim **12** – stand withdrawn from consideration as being drawn to non-elected species of the invention.

***Scope of Present Petition***

6. The present petition is limited to in scope to claim **23**.

***Background***

7. The present application was filed on **30 March 2004** with 54 claims, and was subject to a requirement for restriction and species election. **Appendix A** lists claims **12, 18, 19** and **21-23** following a preliminary amendment filed on **6 August, 2007** prior to commencement of examination on the merits.
8. It is noted that claim **19/12**, upon which claims **22** and **23** depended, provides for additional limitations on the term “said previously stored information”, however this term lacks proper antecedent basis.
9. On **18 October 2007**, in a first Office Action, the Examiner rejected claims **12-22 and 47** under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. **US 2004/0204797** to Vickers; and rejected claim **23** under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. **6,307,277** to Tamai et al.
10. On **21 January 2008**, in response to these rejections, claim **23** was amended as follows:

23. A method of controlling a hybrid electric vehicle, wherein said hybrid electric vehicle incorporates a power generator, an energy storage device and a traction motor, said method as recited in claim 22, further comprising:
- a. determining at least one location of the hybrid electric vehicle;
  - b. determining a measure responsive or related to an amount of energy required for said hybrid electric vehicle to reach a destination, wherein said measure is responsive to said at least one location of said hybrid electric vehicle in relation to said destination;
  - c. causing a fuel flow to said power generator and generating power with said power generator responsive thereto;
  - d. shutting off said fuel flow to said power generator responsive to said measure in advance of said hybrid electric vehicle reaching said destination;
  - e. generating power with said power generator after said fuel flow is shut off to said power generator; and;
  - f. using at least a portion of said power generated by said power generator to store energy in said energy storage device; and
  - g. continuing travel of said hybrid electric vehicle to said destination at least using said traction motor powered by said energy storage device.

11. Claim 23 was rewritten in independent form including all of the limitations of claims 22 and 12 upon which claim 23 depended, but -- in view of the lack of antecedent basis for the term "said previously stored information" in claim 19 -- excluding the limitations of claim 19 upon which claim 22 depended.
12. The following element was also added to claim 23: "causing a fuel flow to said power generator and generating power with said power generator responsive thereto". This addition was made for clarity, so as to provide proper antecedence for the operation of shutting off fuel flow to the power generator, in order to improve clarity. It is inherent that there had to first be a fuel flow to the power plant before that fuel flow could be shut off.
13. On **16 April 2008**, the Examiner finally rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Vickers in view of U.S. Patent Application Publication No. **US 2003/0230440** to Kamen et al., and further in view of Tamai et al.

14. On **7 May 2008**, Applicant requested reconsideration of the finality of the Office Action, which request was denied by the Examiner in an Advisory Action mailed on 04 June 2008.
15. On **16 July 2008**, the undersigned participated in a telephonic interview with the Examiner and the Supervisory Examiner.
16. The Examiner asserted that the elimination of the limitations of claim **19** from claim **23** broadened the scope of the claim **23**, thereby necessitating the new ground of rejection. The Examiner asserted that the addition of the limitation of “causing a fuel flow to said power generator and generating power with said power generator responsive thereto” further necessitated the new ground of rejection.
17. The final rejection in the Office Action of **16 April 2008** included a new ground for rejecting claim **23** over U.S. Patent Application Publication No. **US 2003/0230440** to Kamen et al. Kamen et al. is not relevant to the limitations of claim **19** that were excluded from claim **23**, but is relevant to the limitations that were in the original language of claim **23**, i.e. “generating power with said power generator after said fuel flow is shut off to said power generator, and using at least a portion of said power generated by said power generator to store energy in said energy storage device”.
18. The Examiner contends that Tamai et al. was needed to support the rejection of the added limitation, i.e. “causing a fuel flow to said power generator and generating power with said power generator responsive thereto”, however, this subject matter is also explicitly disclosed in paragraphs [0002] and [0014] of Vickers, thereby precluding the need to refer to Tamai et al. for this limitation.

#### **POINT(S) TO BE REVIEWED**

1. Whether Applicant’s amendment of claim **23** necessitated the new ground of rejection in respect of Kamen et al.
2. Whether the final rejection of claim **23** is premature.

### **ACTION REQUESTED**

Withdraw the finality of the final rejection of the Office Action mailed on **16 April 2008**.

### **REMARKS**

**Point 1: Whether Applicant's amendment of claim 23 necessitated the new ground of rejection in respect of claim 23.**

19. Original claim 23/22/19/12 originally depended upon claim 19, however claim 19 provided for further limitation of the term "said previously stored information" which lacked antecedent basis from claim 12, thereby rendering claims 23, 22 and 19 indefinite in scope. Kamen et al. is not relevant to the limitation of claim 19, i.e. to "wherein said previously stored information is responsive to the energy that had been required during at least one previous trip to reach said destination along a predicted route to said destination". Accordingly, the deletion of this limitation from claim 23 could not have possibly necessitated the new ground of rejection of claim 23 over Kamen et al.
20. The limitation added to claim 23 of "causing a fuel flow to said power generator and generating power with said power generator responsive thereto" was already inherent in claim 23, and was explicitly disclosed by Vickers (paragraphs [0002] and [0014]) and by Tamai et al. originally used to reject claim 23. Accordingly, the addition of this limitation to claim 23 could not have possibly necessitated the new ground of rejection of claim 23 over Kamen et al.
21. Kamen et al. discloses a Sterling engine that exhibits an inherent lag time, and accordingly is relevant to the limitation of claim 23 as originally filed, i.e. "generating power with said power generator after said fuel flow is shut off to said power generator, and using at least a portion of said power generated by said power generator to store energy in said energy storage device."
22. In respect of original claim 23, Kamen et al. could have been used as a ground of rejection in the first Office Action.

23. The relevance of Kamen et al. to claim **23** is not affected by any change in scope of claim **23** that may have been caused by the exclusion therefrom of the limitations of claim **19**, (for a definiteness); or the addition thereto of the limitation of “causing a fuel flow to said power generator and generating power with said power generator responsive thereto”, (for proper antecedence for the operation of shutting off fuel flow to the power generator, in order to improve clarity).

24. Accordingly, because Kamen et al. could have been cited against original claim **23**, Applicant’s amendment of claim **23** could not possibly have necessitated this new ground of rejection.

**Point 2: Whether the final rejection of claim 23 is premature.**

25. The finality of the final rejection should be found to be premature if it is found that Applicant’s amendment of claim **23** did not necessitate the new ground of rejection in respect of Kamen et al..

**Payment of Fees**

Applicant does not believe that a fee is due for this petition. If Applicant is in error as to whether a fee is due now, the Commissioner is authorized to charge deposit account **04-1131** for any fee that is actually due.

**Summary and Conclusions**

Applicant respectfully submits that the new ground of rejection of claim **23** over Kamen et al. was not necessitated by the amendment of claim **23** following the first Office Action, so that the finality of the final rejection is premature. In view of the above argument, Applicant respectfully requests that the finality of the final rejection be withdrawn.

Respectfully Submitted,

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**APPENDIX A:****Claims 12, 18, 19 and 21-23 As Amended on 6 August 2008  
Prior to Commencement of Examination on the Merits**

12. (Currently amended): A method of controlling a hybrid electric vehicle, wherein said hybrid vehicle incorporates a power generator, an energy storage device and a traction motor, said method comprising:
- determining at least one location of the vehicle;
  - determining a measure responsive or related to an amount of energy required for said vehicle to reach a destination, wherein said measure is responsive to said at least one location of said vehicle in relation to said destination;
  - at least reducing the power generated by said power generator responsive to said measure in advance of said vehicle reaching said destination; and
  - continuing travel of said vehicle to said destination using said traction motor powered at least by said energy storage device.
18. (Original): A method of controlling a hybrid electric vehicle as recited in claim 12, wherein said measure is responsive to previously stored information corresponding to said at least one location of said vehicle for subsequent travel along a predicted route to said destination.
19. (Original): A method of controlling a hybrid electric vehicle as recited in claim 12, wherein said previously stored information is responsive to the energy that had been required during at least one previous trip to reach said destination along a predicted route to said destination.
21. (Original): A method of controlling a hybrid electric vehicle as recited in claim 18, wherein the operation of at least reducing the power generated by said power generator comprises decreasing a fuel flow to said power generator over time.
22. (Original): A method of controlling a hybrid electric vehicle as recited in claim 19, wherein the operation of at least reducing the power generated by said power generator comprises shutting off a fuel flow to said power generator.
23. (Original): A method of controlling a hybrid electric vehicle as recited in claim 22, further comprising generating power with said power generator after said fuel flow is shut off to said power generator, and using at least a portion of said power generated by said power generator to store energy in said energy storage device.